Generator set data sheet

Model:	**C30 N6**
kW rating:	**30.0 natural gas Standby** **30.0 propane Standby**
Frequency:	**60 Hz**
Fuel type:	**Natural gas/propane**
Emissions level:	**EPA emissions**

Fuel consumption

	Natural gas				Propane			
	Standby				Standby			
	kW (kVA)				kW (kVA)			
Ratings	30.0 (37.5)				30.0 (37.5)			
Load	**1/4**	**1/2**	**3/4**	**Full**	**1/4**	**1/2**	**3/4**	**Full**
scfh	147.6	219.0	300.0	380.9	66.4	95.9	129.1	164.1
m^3/hr	4.18	6.20	8.50	10.79	1.88	2.72	3.66	4.65

Engine

	Natural gas	Propane
	Standby rating	Standby rating
Engine model	QSJ2.4	
Configuration	Cast iron, in-line 4 cylinder	
Aspiration	Turbo	
Gross engine power output, kW_m (bhp)	36.9 (49.5)	36.9 (49.5)
Bore, mm (in.)	86.5 (3.41)	
Stroke, mm (in.)	100.0 (3.94)	
Rated speed, rpm	1800	
Compression ratio	9.5:1	
Lube oil capacity, L (qt)	4 (4.54)	
Overspeed limit, rpm	2250	

Fuel supply pressure

Minimum operating pressure, kPa (in H_2O)	1.5 (6.0)
Maximum operating pressure, kPa (in H_2O)	3.2 (13.0)

Air	Natural gas Standby rating	Propane Standby rating
Combustion air, m^3/min (scfm)	1.7 (60.6)	1.6 (56.1)
Maximum air cleaner restriction, kPa (in H_2O)	1.49 (6.0)	
Alternator cooling air, m^3/min (scfm)	N/A	

Exhaust

Exhaust flow at rated load, m^3/min (cfm)	6.7 (240.1)	5.8 (207.6)
Exhaust temperature, °C (°F)	636 (1177)	641 (1186)
Exhaust back pressure (maximum allowable at engine), kPa (in H_2O)	5.0 (20)	5.0 (20)
Exhaust back pressure (actual with factory fitted muffler), kPa (in H_2O)	1.25 (5)	

Standard set-mounted radiator cooling

Ambient design, °C (°F)	50 (122)
Fan load, kW (HP)	2.1 (2.8)
Coolant capacity (with radiator), L (US gal)	10 (2.7)
Cooling system air flow, m^3/min (scfm)	89.6 (3200)
Maximum cooling air flow static restriction, kPa (in H_2O)	0.12 (0.5)

Weights[2]

Unit dry weight kgs (lbs)	548 (1209)
Unit wet weight kgs (lbs)	564 (1245)

Notes:
[1]For non-standard remote installations contact your local Cummins representative.
[2]Weights represent a set with 1-phase with sound level 1 enclosure.

Alternator data

Standard alternators		Natural gas/ propane single phase table	Natural gas/propane three phase table			
Maximum temperature rise above 40 °C ambient		120 °C	120 °C	120 °C	120 °C	120 °C
Feature code		B949-2	B986-2	B946-2	B943-2	B952-2
Alternator data sheet number		ADS-576	ADS-574	ADS-574	ADS-574	ADS-574
Voltage ranges		120/240	120/240	120/208	277/480	347/600
Voltage feature code		R104-2	R106-2	R098-2	R002-2	R114-2
Surge kW		30.5/30.5	30.9/30.9	30.9/30.9	30.9/30.9	30.9/30.9
Motor starting kVA (at 90% sustained voltage)	Shunt	57	71	71	71	71
	EBS	93	113	113	113	113
Full load current amps at Standby rating		125	90	104	45	36

Optional alternators for improved motor starting capability		Natural gas/ propane single phase table	Natural gas/propane three phase table			
Maximum temperature rise above 40 °C ambient		105 °C	105 °C	105 °C	105 °C	105 °C
Feature code		BB96-2	BB94-2	BB93-2	BB95-2	BB92-2
Alternator data sheet number		ADS-579	ADS-577	ADS-577	ADS-577	ADS-577
Voltage ranges		120/240	120/240	120/208	277/480	347/600
Voltage feature code		R104-2	R106-2	R098-2	R002-2	R114-2
Surge kW		31.0/31.0	31.1/31.1	31.1/31.1	31.1/31.1	31.1/31.1
Motor starting kVA (at 90% sustained voltage)	Shunt	68	86	86	86	86
	EBS	112	135	135	135	135
Full load current amps at Standby rating		125	90	104	45	36

Derating factors

Natural gas/propane

Standby	Natural gas: Engine power available up to 762 m (2500 ft) at ambient temperatures up to 40 °C (104 °F). Above these elevations derate at 4% per 305 m (1000 ft) and 2% per 10 °C above 40 °C (104 °F). Propane: Engine power available up to 1005 m (3300 ft) at ambient temperatures up to 40 °C (104 °F). Above these elevations derate at 4% per 305 m (1000 ft) and 2% per 10 °C above 40 °C (104 °F).

Ratings definitions

Emergency Standby Power (ESP):	**Limited-Time Running Power (LTP):**	**Prime Power (PRP):**	**Base Load (Continuous) Power (COP):**
Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power to a constant electrical load for limited hours. Limited-Time Running Power (LTP) is in accordance with ISO 8528.	Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.	Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) is in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.

Formulas for calculating full load currents:

Three phase output

$$\frac{\text{kW} \times 1000}{\text{Voltage} \times 1.73 \times 0.8}$$

Single phase output

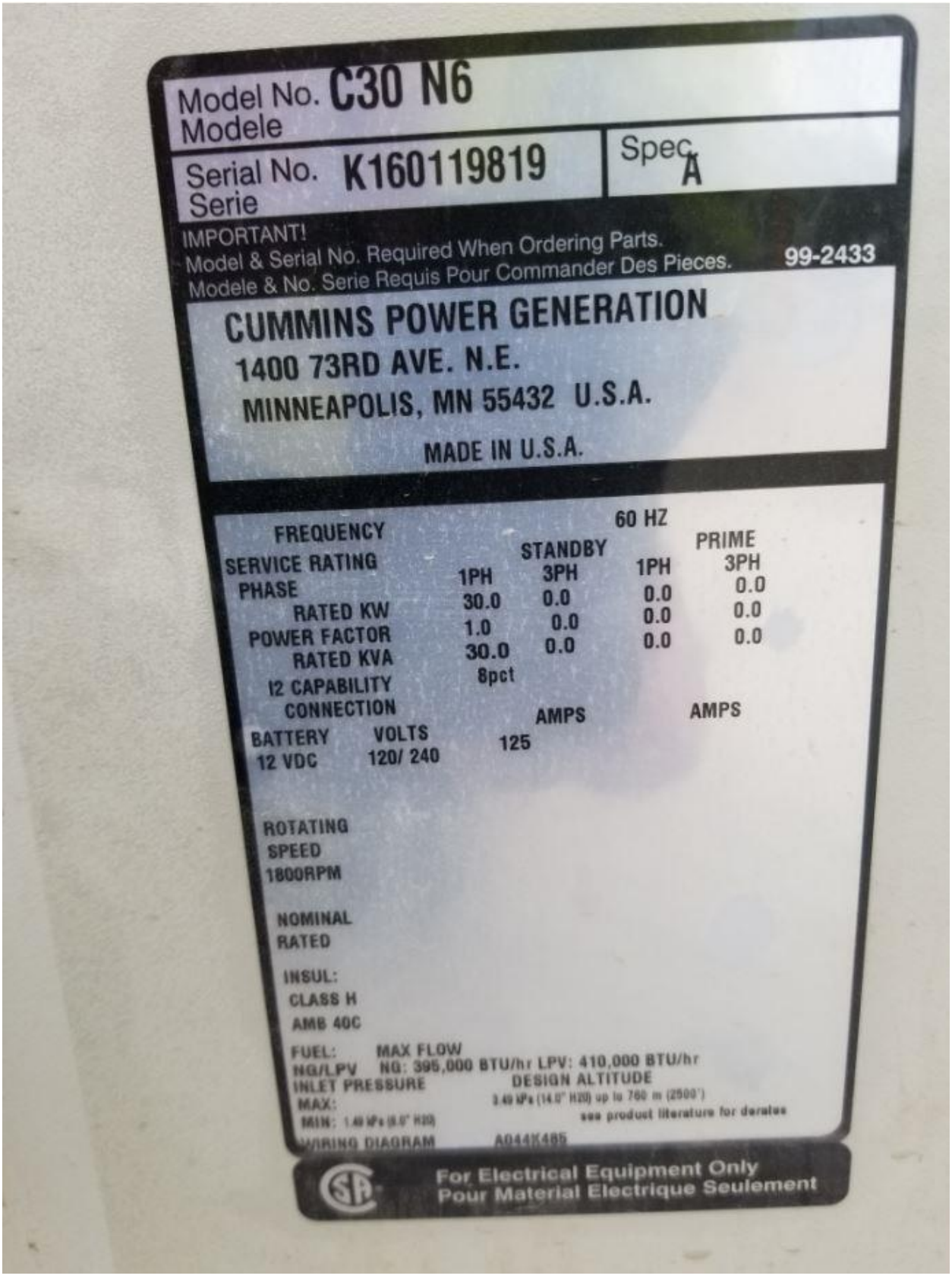
$$\frac{\text{kW} \times \text{SinglePhaseFactor} \times 1000}{\text{Voltage}}$$

Warning: Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.

For more information contact your local Cummins distributor or visit power.cummins.com

Our energy working for you.™

NAD-5696-EN (10/17)



Model No. C30 N6
Modele

Serial No. K160119819
Serie

Spec A

IMPORTANT!
Model & Serial No. Required When Ordering Parts.
Modele & No. Serie Requis Pour Commander Des Pieces.

99-2433

CUMMINS POWER GENERATION
1400 73RD AVE. N.E.
MINNEAPOLIS, MN 55432 U.S.A.

MADE IN U.S.A.

FREQUENCY		60 HZ	
		STANDBY	PRIME
SERVICE RATING	1PH	3PH	1PH	3PH
PHASE				
RATED KW	30.0	0.0	0.0	0.0
POWER FACTOR	1.0	0.0	0.0	0.0
RATED KVA	30.0	0.0	0.0	0.0
I2 CAPABILITY	8pct			
CONNECTION		AMPS		AMPS
BATTERY VOLTS				
12 VDC 120/ 240		125		

ROTATING
SPEED
1800RPM

NOMINAL
RATED

INSUL:
CLASS H
AMB 40C

FUEL: MAX FLOW
NG/LPV NG: 395,000 BTU/hr LPV: 410,000 BTU/hr
INLET PRESSURE DESIGN ALTITUDE
MAX: 3.49 kPa (14.0" H20) up to 760 m (2500')
MIN: 1.49 kPa (6.0" H20) see product literature for derates
WIRING DIAGRAM A044K485

For Electrical Equipment Only
Pour Material Electrique Seulement


Model No. C30 N6
Modèle
Serial No. K160119819
Série
Spec A
IMPORTANT!
Model & Serial No. Required When Ordering Parts.
Modèle & No. Série Requis Pour Commander Des Pièces.
99-2433
CUMMINS POWER GENERATION
1400 73RD AVE. N.E.
MINNEAPOLIS, MN 55432 U.S.A.
MADE IN U.S.A.
FREQUENCY 60 HZ
SERVICE RATING STANDBY PRIME
PHASE 1PH 3PH 1PH 3PH
RATED KW 30.0 0.0 0.0 0.0
POWER FACTOR 1.0 0.0 0.0 0.0
RATED KVA 30.0 0.0 0.0 0.0
12 CAPABILITY 6pct
CONNECTION
BATTERY VOLTS AMPS AMPS
12 VDC 120/ 240 125
ROTATING
SPEED
1800RPM
NOMINAL
RATED
INSUL:
CLASS H
AMB 40C
FUEL: MAX FLOW
NG/LPV NG: 395,000 BTU/hr LPV: 410,000 BTU/hr
INLET PRESSURE DESIGN ALTITUDE
MAX:
MIN:
WIRING DIAGRAM A044K486
see product literature for details
For Electrical Equipment Only
Pour Material Electrique Seulement
OSHPD APPROVED
Equipment Special Seismic Certification Pre-Approval
PER OSP-0375-10
MODELS: C60 N6H,
C36 N6H, C30 N6H, C40 N6, C36 N6,
C30 N6, C25 N6, C22 N6 & C20 N6
MAX Approved Seismic Performance Characteristics
SDS(g) Z/H IP
2.5 1.0 1.5
A044D026 REV C
SEISMIC CERTIFICATION
CUMMINS POWER GENERATION
MODELS: C60 N6H, C50 N6H, C45 N6H, C40 N6H, C36 N6H, C30 N6H,
C40 N6, C36 N6, C30 N6, C25 N6, C22 N6 & C20 N6
CERTIFICATE 77789-1301-CERT
Seismic Certification for applicable Building codes : 2012 IBC, 2013 CBC
Tested and analyzed in accordance with: 2012 ICC-ES AC-156
Reference Report:
Dynamic Certification Laboratories# 77789-1301
Approved performance Characteristics:
Sds 2.50, z/h 1.0
A044D018 REV E
c UL us
LISTED
(STATIONARY ENGINE
GENERATOR ASSEMBLY)
11KL
FILE: AU3044
A044F289 REV C


Main
Electrical
Power
Generation